AMENDMENTS TO THE CLAIMS:

The present listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-48 (canceled).

49. (new) A method for inducing new blood vessel growth in myocardial tissue of a mammal in need of such treatment comprising:

a) injecting an effective amount of a solution comprising a nucleic acid encoding at least one angiogenic protein or an effective fragment thereof into the myocardial tissue; and

b) administering to the mammal an effective amount of at least one of: stem cell factor (SCF), colony stimulating factor (CSF) or an effective fragment thereof, thereby inducing the new blood vessel growth in the myocardial tissue of the mammal.

50. (new) The method of claim 49, wherein the angiogenic factor is a vascular endothelial growth factor (VEGF) or an effective fragment thereof.

51. (new) The method of claim 50, wherein the VEGF is VEGF-1 or VEGF165.

52. (new) The method of claim 49, further comprising expressing the angiogenic protein or fragment in the myocardium.

53. (new) The method of claim 52, wherein the method further comprises increasing frequency of endothelial progenitor cells (EPC) in the mammal.

54. (new) The method of claim 52, wherein the increase in frequency of the EPC is at least about 20% as determined by a standard EPC isolation assay.

55. (new) The method of claim 52, wherein the method further comprises increasing EPC differentiation in the mammal.

56. (new) The method of claim 55, wherein the increase in EPC differentiation is at least about 20% as determined by a standard EPC culture assay or a standard hindlimb ischemia assay.

57. (new) The method of claim 50, wherein the level of VEGF or VEGF fragment expression is sufficient to increase neovascularization by at least about 5% as determined by a standard cornea micropocket assay.

58. (new) The method of claim 49, wherein the amount of administered SCF, CSF or fragment is sufficient to increase EPC bone marrow derived EPC incorporation into foci.

59. (new) The method of claim 58, wherein the increase in EPC bone marrow derived EPC incorporation into foci is at least about 20% as determined by a standard rodent bone marrow (BM) transplantation model.

60. (new) The method of claim 49, wherein the method further comprises administering at least one angiogenic protein or effective fragment thereof before or after administration of the nucleic acid to the mammal.

61. (new) The method of claim 49, wherein the method further comprises administering to the mammal an anti-coagulant before, during, or after administration of the nucleic acid to the mammal.

62. (new) The method of claim 61, wherein the anti-coagulant is one or more of urokinase, plasminogen activator, and heparin.

63. (new) The method of claim 49, wherein the nucleic acid is directly injected with a catheter or stent.

64. (new) The method of claim 49, wherein the nucleic acid is inserted into a cassette operably linked to a promoter.

65. (new) The method of claim 49, wherein the myocardial tissue is ischemic or is associated with infarction or dysfunction.

66. (new) The method of claim 49, wherein the angiogenic protein or factor is one of acidic fibroblast growth factor (aFGF), basic fibroblast growth factor (bFGF), epidermal growth

factor (EGF), transforming growth factor α and β (TGF-α and TFG-β), platelet-derived endothelial growth factor (PD-ECGF), platelet-derived growth factor (PDGF), tumor necrosis factor α (TNF-α), hepatocyte growth factor (HGF), insulin like growth factor (IGF), erythropoietin, colony stimulating factor (CSF), macrophage-CSF (M-CSF), granulocyte/macrophage CSF (GM-CSF), stem cell factor (SCF), angiopoetin-1 (Ang1), nitric oxidesynthase (NOS); or a mutein or fragment thereof.